Office Action Date: 12/04/2009

Remarks/Arguments

Claims 1-13 and 18-23 are pending in this application, and are rejected in the Office Action of December 4, 2009. No claim amendments are presented herein. However, a listing of the pending claims in the application accompanies this response for the Examiner's convenience.

Re: Patentability of Claims 1-13 and 18-23 under 35 U.S.C. §103(a)

Claims 1-13 and 18-23 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,513,161 issued to Horimai et al. (hereinafter, "Horimai") in view of U.S. Patent No. 4,907,216 issued to Rijnsburger (hereinafter, "Rijnsburger"), and further in view of U.S. Patent No. 6,108,296 issued to Kajiyama et al. (hereinafter, "Kajiyama"). Applicants respectfully traverse this rejection for at least the following reasons.

Applicants first note that independent claim 1 recites:

"A method for storing data as bit cells in a prerecorded area of an optical recording medium using pits and lands, wherein the pits and lands are placed out of a center of a track of the prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center, and the method comprises a step of alternately placing one of the pits with a first predetermined length and one of the lands with a second predetermined length adjacent to a position of one of the bit cell signal transitions." (emphasis added)

As indicated above, independent claim 1 recites a method for storing data as bit cells in a prerecorded area of an optical recording medium using pits and lands. The pits and lands are placed out of a center of a track of the prerecorded area and the data is encoded by bit cell signal transitions of the pits and lands from one side of the track center to another side of the track center. Moreover, the method comprises a feature of alternately placing one of the pits with a first predetermined length and one of the lands with a second predetermined length adjacent to a position of one of the bit cell signal Customer No. 24498 Attorney Docket No. PD020107 Office Action Date: 12/04/2009

<u>transitions</u>. Independent claims 21-23 recite subject matter similar to independent claim 1, including the foregoing feature.

None of the cited references, whether taken individually or in combination, discloses or suggests all of the features recited by independent claims 1 and 21-23. In particular, none of the cited references discloses or suggests the aforementioned claimed feature of alternately placing one of the pits with a first predetermined length and one of the lands with a second predetermined length adjacent to a position of one of the bit cell signal transitions.

On pages 2-4 of the Office Action dated December 4, 2009, the Examiner admits that neither Horimai nor Rijnsburger discloses the aforementioned claimed feature. In an attempt to remedy this admitted deficiency of Horimai and Rijnsburger, the Examiner relies on Kajiyama, and specifically cites column 1, line 45 through column 2, line 18 thereof which state:

"The present invention is to provide a device in which micro-pits (pit length: 1T, for example) which are disabled precise copying by means of illegal copying described above and enable signals different from signals of a normal disc to be detected in case of failure in precise copying are recorded in an optical disc beforehand, determination is made whether the subject disc is a normal disc or not based on whether these micro-pits are normally detected or not, and readout of the subject disc is enabled or disabled based on such determination. The micro-pits or micro-pit strings recorded in the optical disc according to the present invention can not be precisely copied by any method which has been conventionally used for illegal copying. Therefore, it can be determined whether a loaded disc is an illegally copied disc or a normal disc based on whether the micro-pits are detected or not or based on the signals read out of the micro-pit strings are normal or not. Also, based on the results of such determination, reading of illegal discs can be disabled.

Still also, the present invention is to provide a device in which micro-variations which are disabled precise copying by means of illegal copying and enable duty variation components different from duty variation components of a normal disc to be detected in case of failure in precise copying are provided to the pit length of an optical disc beforehand, determination is made whether the subject disc is a normal

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disc or not based on whether such micro-variations are normally detected or not, and readout of the subject disc is enabled or disabled based on such determination. The micro-variations provided to the pit length of the optical disc according to the present invention can not be precisely copied by any method which has been conventionally used for illegal copying. Therefore, it can be determined whether a disc is an illegally copied disc or a normal disc based on whether the micro-variations of the pit length are present or not or based on whether the micro-variations of the pit length are coincided with the micro-variations which should have been recorded in the normal disc. Also, based on the results of such determination, readout of illegal discs can be disabled."

As indicated above, the cited passages of Kajiyama nowhere disclose or suggest, *inter alia*, the claimed feature of <u>alternately placing a pit with a first predetermined length and a land with a second predetermined length adjacent to a position of a bit cell signal transition. While Kajiyama discloses to provide micro pits with a specified length (typically 1T) followed by lands with a specified length (typically 1T) on an optical recording medium for copy protection, the reference is completely silent about any specific arrangement of such copy protection sequences of micro pits and lands relative to any special physical or logical position on the optical disc. At best, the proposed combination of Horimai, Rijnsburger and Kajiyama would result in an arrangement which includes at least one sequence of a pit with a first predetermined length and a land with a second predetermined length. As such, Applicants submit that Kajiyama is unable to remedy the aforementioned admitted deficiency of Horimai and Rijnsburger.</u>

Accordingly, since none of the cited references, whether taken individually or in combination, discloses or suggests at least one notable feature of the claimed invention, namely, the feature of "alternately placing one of the pits with a first predetermined length and one of the lands with a second predetermined length adjacent to a position of one of the bit cell signal transitions" as recited by independent claim 1 (and similarly recited by independent claims 21-23), Applicants submit that claims 1-13 and 18-23 are non-obvious over the proposed combination of Horimai, Rijnsburger and Kajiyama, and withdrawal of the rejection is respectfully requested.

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Conclusion

In view of the foregoing remarks/arguments, the Applicants believe this application stands in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicants' attorney at (609) 734-6813, so that a mutually convenient date and time for a telephonic interview may be scheduled. No fee is believed due from this response. However, if a fee is due, please charge the fee to Deposit Account 07-0832.

Respectfully submitted,

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